

# Residential Programs

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# Considerations for Increased Savings

- Scaling up existing programs
- Improvements – New Technology and Best Practices
- Changes in the Marketplace



# Changes in the Residential Sector

- Evolution of lighting → transition to LEDs
- Appliances Standards → continually improving
- NH Energy Codes → updating in the next few years?
- Avoided Energy Costs → dropping = affect Program B/C
- Emerging Technologies → continuous improvement
- Education → about ways to save

# Home Energy Assistance

**Customer:** Residential, 1-4 Units

- Income Qualified: Must meet eligibility (FAP or EAP)
- Community Action Agencies qualifies customers

**Approach:** Whole house weatherization starting with energy audit.

**Implementation:** Community Action Agencies perform audits and do work. CAA's also work to leverage and combine other funding sources, such as federal Weatherization.

**Measures:** Air Sealing, Insulation, Lighting, Water Saving low-flows, heating systems, appliance replacement

**Incentive:** 100% of eligible measures.

# Home Energy Assistance

2017	Budget		Annual Savings			B/C Ratio	Number of Projects
	\$	%	MWH	%	MMBtu		
Electric Program	\$4,665.7	17%	549	1%	3,824	1.17	648

2017	Budget		Annual Savings			B/C Ratio	Number of Projects
	\$	%	MMBtu	%	MWH		
Natural Gas Program	\$1,246.7	17%	6,508	4%	70	1.06	240

## Program Challenges

- Measures for additional electric savings
- Cost Effectiveness
- Funding for health and safety repairs prior to weatherize

## Looking Forward

- Additional funds with EERS to reach more homes



# Maintaining a Cost-Effective Program

- Continue looking for high use homes
- Continue looking for more electric saving measures
- Continue funding health & safety measures

# Home Performance with ENERGY STAR

**Customer:** Residential, 1-4 Units

- Targeted to high-use homes, qualified via HHI Screening Tool

**Approach:** Whole house weatherization starting with energy audit. Contractor recommends all energy savings opportunities. Customer can decide what to implement. Package must be cost effective for incentive.

**Implementation:** Independent BPI certified contractors on a qualified list

**Measures:** Air Sealing, Insulation, Lighting, low-flows, refrigerator voucher, heating system (if doing all recommended weatherization)

**Incentive:** 50% for most measures.  
100% for lighting and water savings devices.

# Home Performance with ENERGY STAR

2017	Budget		Annual Savings			B/C Ratio	Number of Projects
	\$	%	MWH	%	MMBtu		
Electric Program	\$2,865.0	10%	844	1%	7,589	1.49	1,253

2017	Budget		Annual Savings			B/C Ratio	Number of Projects
	\$	%	MMBtu	%	MWH		
Natural Gas Program	\$866.0	12%	8,598	6%	196	1.34	237

## Program Challenges

- Increasing per home electric & gas savings (lighting, appliances and other measures)
- Achieving Cost Effective Savings

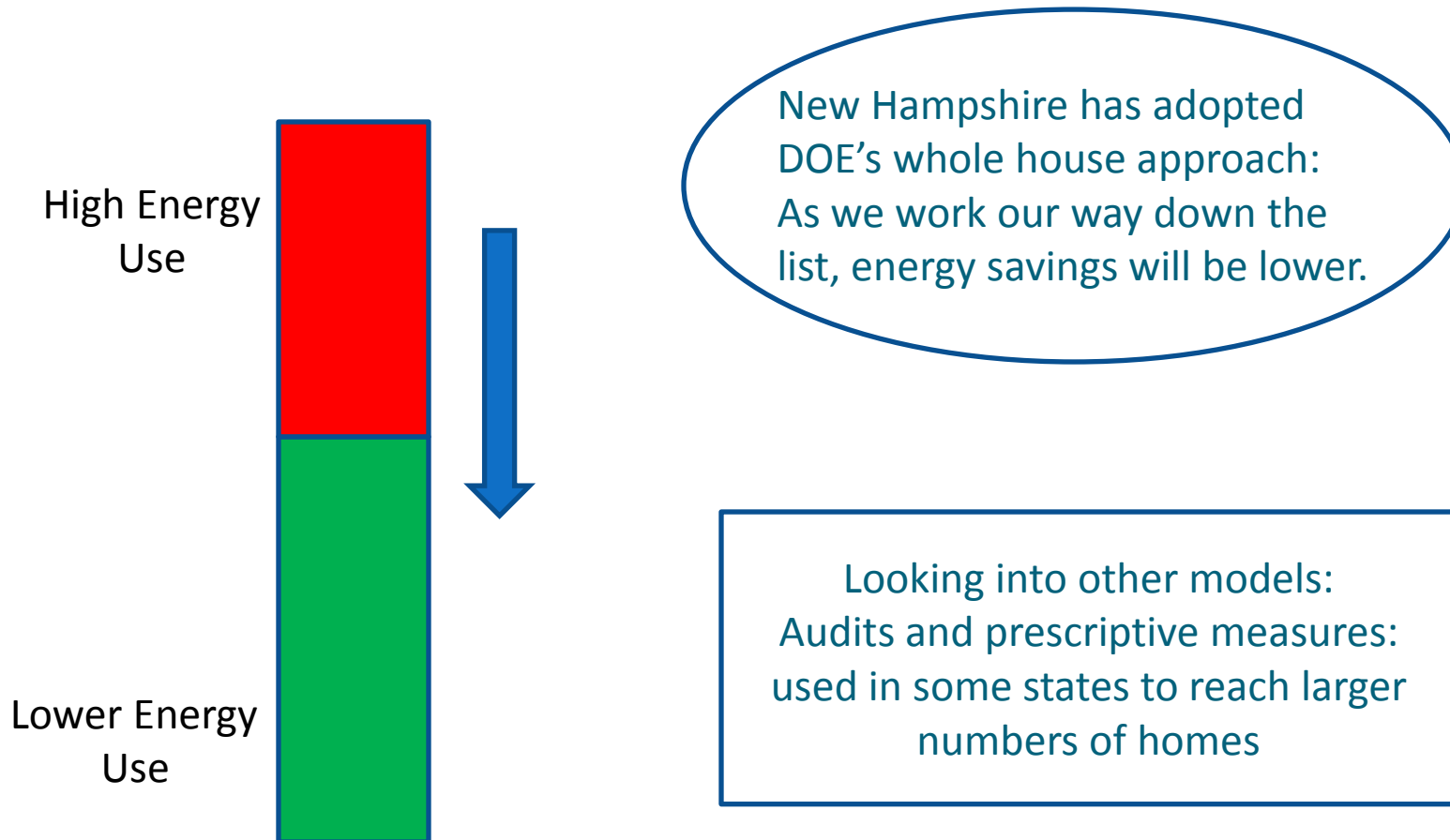


# Home Performance with ENERGY STAR

## Looking Forward

- Increase Marketing → increase customer demand
- Financing → remove first cost barrier
- Serve more Multi-Family buildings
- Fuel Use Screening, Comprehensive Retrofits and Cost Effective Savings

# Comprehensive Retrofits and Cost Effective Savings



# ENERGY STAR Homes

**Customer:** Residential, single and multi-family  
New construction or complete rehab

**Approach:** New construction that meets ENERGY STAR certification. Review, Inspection and testing during construction

**Implementation:** Third party for Inspections and Home Energy Rating. Independent contractors/builders for construction.

**Measures:** Plan review, insulation inspections and blower door testing during and after construction. Helping builders improve HERS scores through efficient building practices and more efficient heating systems.

**Incentive:** Certification testing covered. Free LED's. Eligible fixtures and appliances. HERS score achievement – performance based incentive.

# ENERGY STAR Homes

2017	Budget		Annual Savings			B/C Ratio	Number of Projects
	\$	%	MWH	%	MMBtu		
Electric Program	\$1,570.0	6%	1,300	2%	2,687	3.24	454

2017	Budget		Annual Savings			B/C Ratio	Number of Projects
	\$	%	MMBtu	%	MWH		
Natural Gas Program	\$296.4	4%	3,105	2%	71	1.91	86

## Program Challenges:

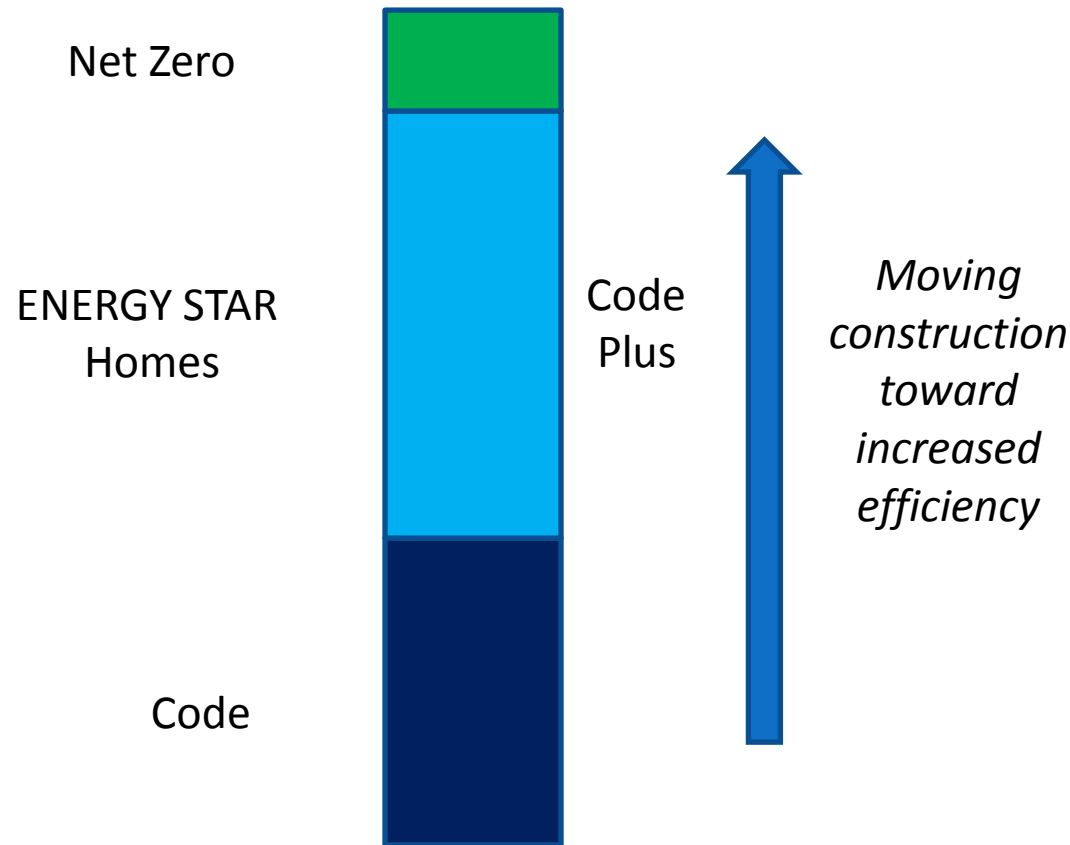
- Measures for additional electric savings
- Lack of certified HVAC contractors
- Impact of potential new code adoption
- Geothermal tax credits

# ENERGY STAR Homes

## Looking Forward:

- Increased demand for new efficient housing
- Net Zero Homes
- Energy Star Homes (tiered performance)
- Code Plus Program
- Manufactured Homes Programs

# Multiple Levels for Efficient New Homes



# ENERGY STAR Products

**Customer:** Residential, mass market

**Approach:** Rebates to encourage purchase of high efficiency ENERGY STAR products

**Implementation:** Instant rebates and markdowns for lighting, mail-in or web rebate forms for appliances and heating systems.

**Measures:** LED Bulbs, LED fixtures, Clothes Washers, Clothes Dryers, Refrigerators, Air Conditioners, Air Purifiers, Dehumidifiers, Pool Pumps, Refrigerator Recycling, Heat Pumps, Mini Splits and Heat Pump Water Heaters  
Natural Gas – Heating Systems, Water Heaters, Thermostats

**Incentive:** Varies by measure and incremental cost

# ENERGY STAR Products

2017	Budget		Annual Savings			B/C Ratio	Number of Projects
	\$	%	MWH	%	MMBtu		
Electric Program	\$3,025.3	11%	11,148	17%	467	3.16	118,444

2017	Budget		Annual Savings			B/C Ratio	Number of Projects
	\$	%	MMBtu	%	MWH		
Natural Gas Program	\$1,025.2	14%	13,371	9%	58	1.08	1,719

## Program Challenges:

- How quick will LEDs become standard practice
- Cost Effectiveness for gas
- Market for appliances



# ENERGY STAR Products

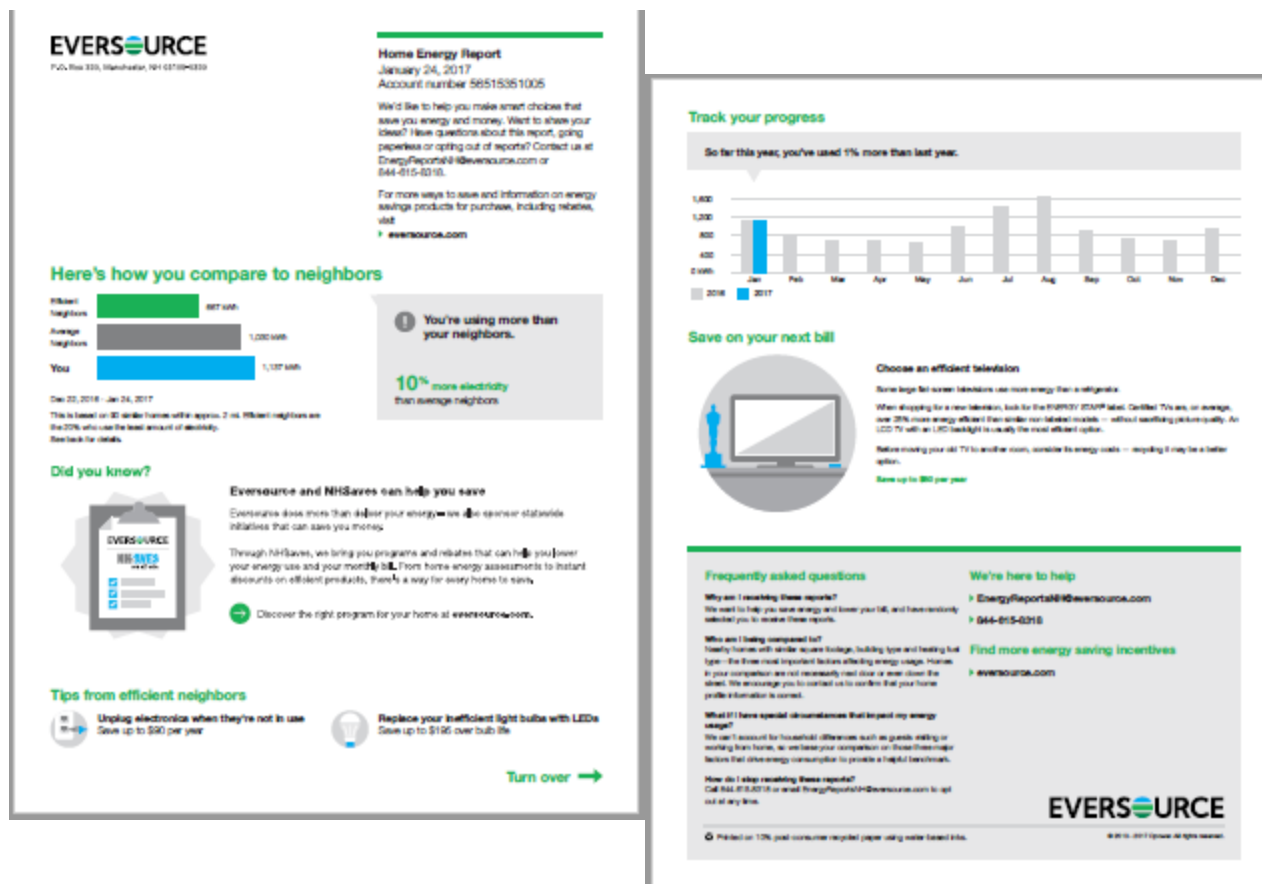
## Looking Forward:

- High efficiency heat pump heating/cooling technology
- Expand consumer education
- Expand online presence for products and incentives
- Increase incented product categories, and possibly increase recycling options

# Expanded Offerings and Program Models

- **New Measures and New technology**
  - Lighting Controls
  - Additional Appliances
  - Home Energy Management Systems (elec & fossil savings)
- **Upstream incentives**
  - Encourage distributors and manufacturers to stock the most efficient options

# Customer Behavior – Home Energy Reports



### Track your progress

So far this year, you've used 1% more than last year.

Month	2016 (kWh)	2017 (kWh)
Jan	~1000	~1100
Feb	~800	~850
Mar	~800	~850
Apr	~800	~850
May	~800	~850
Jun	~900	~950
Jul	~1000	~1050
Aug	~1100	~1150
Sep	~900	~950
Oct	~800	~850
Nov	~800	~850
Dec	~900	~950

### Save on your next bill

**Choose an efficient television**

Some large flat screen televisions use more energy than a refrigerator.

When shopping for a new television, look for the ENERGY STAR label. Certified TVs are, on average, over 20% more energy efficient than similar non-labeled models -- without sacrificing picture quality. An LCD TV with an LED backlight is usually the most efficient option.

Before moving your old TV to another room, consider its energy costs -- recycling it may be a better option.

**Save up to \$60 per year**

### Frequently asked questions

**Why am I receiving these reports?**  
We want to help you save energy and lower your bill, and have personally selected you to receive these reports.

**Who am I being compared to?**  
Energy homes with similar square footage, building type and heating fuel type -- the three most important factors affecting energy usage. Homes in your comparison are not necessarily next door or next door the street. We encourage you to contact us to confirm that your home profile information is correct.

**What if I have special circumstances that impact my energy usage?**  
We can't account for household differences such as guests, eating or working from home, etc. We leave your comparison on fixed (non-major) factors that drive energy consumption to provide a helpful benchmark.

**How do I stop receiving these reports?**  
Call 844.615.0216 or email [EnergyReports@eversource.com](mailto:EnergyReports@eversource.com) to opt out at any time.

**We're here to help**

➔ [EnergyReports@eversource.com](mailto:EnergyReports@eversource.com)

➔ 844-615-0216

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